increment-consuming as well, so they're counted

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twice?

from the -- entities' Preque Isle plant that

consumes increment. And that's not the

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MR. BENDER: Well, the regulation says that they're not in the baseline, so they'd be increment -- those emissions from -- and the way

4 the regulation reads is the actual emissions

5 from the source. And it's not the modification.

6 The regulations says the actual emissions from

7 the source are outside the baseline in consumed

increments. So they wouldn't be. I think to

3 increments. So they wouldn't be -- I think to

9 answer your question, they wouldn't be in the

baseline and increment consuming. They justwouldn't be in the baseline.

JUDGE SHEEHAN: My question was that they were in the baseline. They were alive and

well. They were out there at the time thebaseline was calculated. So it seems natural

16 that they would be having been included in the

17 baseline. What would the baseline encompass if

18 not actual emissions as of that point, as of

19 1975?

20 MR. BENDER: And the way Congress

21 defined it is it's a concept that is -- whatever

22 the -- it should be the air quality in the area

1 there's a list of sources that are

2 increment-consuming. Their emissions are

3 modeled, and then that total from the

4 increment-consuming source list is then compared

5 to the increment. I'm not aware that the actual

6 baseline concentration is a number that's

7 calculated. It's a calculation of

8 increment-consuming sources compared to the

9 increment. So if a source is modified

10 after -- a major source is modified, major

modification, it qualifies as construction.

JUDGE WOLGAST: But one thing I'm having trouble with is at the point that they

14 establish the baseline, then an increment is15 calculated based on then-available new potential

16 emissions that is the delta between the baseline

17 and then the max itself to ensure that the area

18 stays in attainment. The increment then -- I'm

19 just -- I'm having a lot of trouble with the

20 fact that when you pull any new facility or any

21 new modification that then gets sort of taken

22 out of the pre-baseline and then moved over to

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or the modeling representative of the air

2 quality in the area, but then there's provisions

3 or provisos to that. And some things are

4 subtracted from the baseline if certain events

5 occur. And one of those events is construction,

6 which is then defined to include a modification.

7 So a source that is -- a major source that is

8 constructed or modified after '75 is, by that

9 definition, not within the baseline

10 concentration.

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JUDGE SHEEHAN: But if there was -- yes, go ahead.

JUDGE WOLGAST: Are you saying then that you would recalculate the baseline at that point as well as the increment? When you have a modification post-establishment of the baseline, are you saying you'd recalculate the baseline? 17

MR. BENDER: Conceptually, that's what happens. But I would note that when the modeling is done for the PSD permitting, the modeling is just of the increment and it's

22 compared to whatever the increment is. And so

1 the other side of the ledger, in my mind,

2 increment would not have been calculated the way

3 it was, if in fact all of those emissions now

4 are moving from one side of the ledger to the5 other side of the ledger.

MR. BENDER: I think -- to answer your question, the increment is established in the regulations. For example, a 24-hour SO2 is 5

9 microns per cubic liter. When a permit

10 application comes in, the permit applicant

identifies what's called map sources. Allsources will be modeled for map compliance.

It also identifies PSD

increment-consuming sources. And those PSDincrement-consuming sources are then used to

16 run a separate and additional modeling

17 result. And that modeling result is compared

18 to the increment, the 5 microns. And so what

19 you're doing is you're just making your PSD

20 increment-consuming sources list more21 inclusive by including those sources that

major modifications -- major modified sources

9 (Pages 30 to 33)

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that were modified after the baseline date. 1

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That source would be included in that modeling runs of the PSD sources. Then that result is compared to the increment threshold, so it'd be the 5 microns, for example, in the class 1 monitor.

JUDGE REICH: I go back one step. I understand, I think, the significance of whether something was in or not in based on -- but how is the baseline calculation used? What is the significance of the number you would generate by 11 generating a baseline calculation?

MR. BENDER: I see my time is up, Your Honor. I think that answer in the way that I understand it is these permit applications and analysis are wrong is that the baseline does not figure. The application doesn't identify what the baseline was.

18 19 It only identifies what the 20 increment consumption is and then compares 21 that to the --

JUDGE REICH: So you're saying whether

used for the permit limits, permit limits, to 1 align with the NAAQS and increment standard 2 limits in average periods, that the PM and SOX 3 average periods in the permit were generally 4 longer, more hours than the very short NAAQS 5 increment standard time periods. 6

The response to comments by NMU is certainly not very detailed. But in their brief, they make the argument that they did do the calculation that you asked for after all and it came up with 87 pounds per hour. And that reflects short-term emission limits. What's wrong with that?

MR. BENDER: The 87 pounds per hour is 14 not an hourly limit and it's not a maximum 15 theoretical emission. Instead, it's taking the 16 24 -- my understanding it's taken a 24-hour 17 limit or the 24-hour emissions, assuming the.2 18 pounds per million BTU SO2 limit, for example, 19 and dividing it by 24. So it assumes that the 20

24-hour limit is actually a 1-hour limit, enforceable on a 1-hour period, but it's not. 22

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this was still included or backed out of the

baseline wouldn't have any real significance? 2

The only real significance is whether it's 3

counted towards the increment. 4

MR. BENDER: Right. The significance of it is whether or not it counts towards which sources -- consumed increment are included in that --

JUDGE REICH: Right. But it's a focus on consuming increment, not being or not being part of the baseline.

MR. BENDER: Right. I don't think identifying what that baseline was as a number in 1975 or today is critical or -- I don't even know that it's looked at. Instead, what it's focused on the amount of increment and how much will exist. Thank you.

17 18 JUDGE SHEEHAN: I think I'd like to 19 hold you up for a few more minutes if I could, a 20 few more areas yet to go through. Modeling?

You seem to be arguing that the -- to take an 21 example, PM and SO2, that the average periods You know, within that 24-hour period, the source

could still comply with the 24-hour average and 2

have double the hour emission rates as long as 3

it made up for that during the 24-hour period by 4 reducing operations or burning of cleaner fuel, 5

such as wood. There's no protection in the

limits of a certain average because the limits 7 aren't enforceable that short-term --8

JUDGE SHEEHAN: So what they claim is 9 a 1-hour limit, you're saying is in reality a 10 24-hour limit? 11

MR. BENDER: That's correct. When you 12 look at the permit, Your Honor, there's for PM 13 -- or SO2, for example, there's a 30-day and a 14 24-hour limit. There's no hour limit, there's 15 no 3-hour limit, which is different from what 16 many permitting sources or permitting agencies 17

do. And I think we included one example as an 18 exhibit where the agency will set limits -- a 19

30-day limit, an annual limit maybe, 24-hour 20

limit, and a 3-hour limit -- and it will model 21

each of those for the relevant mass and 22

10 (Pages 34 to 37)

38 increment. And that's consistent with the NSR there are numerous power plants. And there's 1 2 Manual that says model with the maximum, either 2 3 the maximum physical capacity or the enforceable 3 4 limit, when there is an enforceable limit that 5 corresponds to the average in the period. 5 6 JUDGE SHEEHAN: Thank you. Lastly, 7 turning to the Class 1 increment issue. 8 MR. BENDER: Yes. 9 JUDGE SHEEHAN: The NSR Manual sets 9 10 out a 1-microgram limit as far as a trigger for 11 the Class I analysis goes. You seem to think 11 12 that's -- I guess you argue in your brief it's 12 13 unlawful. Is there any limit existing in your 13 problem. 14 14 mind that's so low that no analysis needs to be 15 done, or any distance so great from the source 15 to the area of impact, the Class 1 impact area, 16 17 that would not require the Class 1 analysis to 17 18 be done? 18 19 MR. BENDER: I think the act prohibits 19 20 any contribution to a violation. So I think 20 21 21 under the act, that's the only option. 22 If your question is whether 22 39

two power plants of numerous units at each in Marquette, Michigan. There are mining operations there. There's this boiler and there are power plants in Northern Wisconsin as well. I mean, when you include all of those, all of those increment-consuming sources, it's certainly foreseeable.

JUDGE SHEEHAN: What about the practical reality here that the state did contact the federal land managers at Seney and Isle Royale, both of whom said we don't have a

MR. BENDER: I think that was the for the AQRV analysis, Your Honor. And the AQRV analysis and the increment analysis need to be run separately. And there's no authority in the act or in the regulations or in any guidance I'm aware of for the federal land manager to waive the increment analysis. The act is pretty clear that to be able to obtain a permit, the applicant has to demonstrate compliance with

actively speaking, is there anything that's de minimis, that there's such a low

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concentration, I think if there is, it's much 3 4 lower than what was actually modeled for this

5 plant. This plant model had a 0.42 microns

per cubic meter for 24-hour SO2. That's over

8 percent of the relevant increment. When

8 the EPA has proposed in the past to do

9 significant impact levels by rule, it has

10 used a metric of 4 percent of the relevant

11 increments. So based on that standard, which

12 I think is still too high, even based on that 13 metric, this is still double that.

14 JUDGE SHEEHAN: So it's less than half 15 of what the NSR Manual sets out, but it's still 16 in your mind unacceptable?

17 MR. BENDER: That's right, Your Honor. 18 The NSR Manual, and I note that it's included in

19 a footnote in the NSR Manual, but the NSR Manual 19 20

20 is 24-hour 1-micron standard. It's 20 percent

21 of the entire increment for all

increment-consuming sources in an area where

increment. They cannot cause or contribute to a 1 2 violation of increment.

3 JUDGE SHEEHAN: So you're saying that 4 the state did not provide all the information to 5 the land managers at Seney and Isle Royale?

6 MR. BENDER: What I'm saying is that 7 the state did not conduct an increment analysis 8 to know whether or not the increment was

9 violated or not. Based on the model

10 concentration that they did run, the screening

11 model, it showed 8 percent, which is a pretty significant number for the entire increment in

13 that Class 1 area to know whether the increment

itself has been violated or not. Just didn't 14 15 run that model to know.

16 JUDGE REICH: Okay, thank you. Mr. 17 Gordon?

> MR. GORDON: Good morning. JUDGE REICH: Good morning. MR. GORDON: I'd like to reserve 5

minutes of the 30 minutes that I'm allotted for 21 rebuttal.

11 (Pages 38 to 41)

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Your Honors, Petitioner identifies 2 a whole range of issues on which they 3 disagree with the conclusions of the Michigan 4 Department of Environmental Quality. And I 5 think it's important to remember before we get into the specific issues what the 6 7 standard of review here is. And that is that 8 they have to demonstrate that there's been a 9 clear error.

I think when we delve into each of the individual issues, you'll find that there actually hasn't been any demonstration of clear error. In fact, when you look at them carefully, they haven't actually shown any issue at all. They've simply demonstrated that they don't agree with the way the DEQ went about its analysis.

There are a whole host of issues. I'm going to present them, if it would please the Court, in the order in which they were arranged, if that's fine with you.

JUDGE SHEEHAN: As sort of a general 22

JUDGE SHEEHAN: But if we turn in that regard to storage, Mr. Kucera, could you put up the facility design document submitted by the state here? There's the facility.

Let me ask you questions, if I may, Mr. Gordon, about that. In the center near the bottom, you see the wood silo capacity, which appears to be a fairly large area compared to the coal silo, which is above and to the left of the wood silo, the little square building? The storage area for wood generally, including the silo and to the 12 right, the handling building and the wood hopper, appear much larger than the coal storage area. Is that accurate that there's a lot more capacity to store wood than coal, 16 as seems to be reflected here in this design?

MR. GORDON: Well, I think the question is how many days of capacity it is. And what the university submitted in its permit application was that the storage capacity at this site for coal and for wood is a three-day

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backdrop question, the very first page of the

2 application said that the intention was for the

3 CFB to operate 100 percent on wood. Then per an 3

addendum several months later, you also repeated

5 that general thought that the primary fuel would

6 be wood. Then you turned to the fact sheet in

7 the permit and you see, as was earlier

8 indicated, coal 22 days per month. Wood

9 obviously seven or eight days. How do you

10 square not necessarily a legal issue, but how do

11 you square the proclamation of your intention to

use so much wood, and then, in reality, seems to 12

13 be anything but?

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MR. GORDON: I think the basis for the mix of coal and wood that are to be burned at the facility and on which the SO2 emission limits are based is based on two factors: One, it's based on the limited storage capacity for any fuel at the facility, be it wood or coal; and two, it's based on the reality that the wood fuel deliveries during those winter months will

fuel supply for each of those separately. Three days fuel supply of wood.

JUDGE SHEEHAN: Your papers did not say separately. It said three days fuel supply without any differentiation between them.

MR. GORDON: Their permit application indicates that there's two silos, and that it is a three-day supply for wood and a three-day supply for coal. And I don't know on this map, on this schematic, does it indicate that the wood silo building is of a larger area than of the coal silo, coal storage area? It is a silo.

Yes. I think the question is, is there anything in the record to demonstrate that the capacity is less than a three-day storage capacity, as represented? And DEQ --

JUDGE SHEEHAN: Well, let's talk about capacity. If you look to say Lot 19 up there at the top and to the left -- Mr. Kucera, could you slide, yes, to the left just to Lot 22, which is the large area. If you could slide it the other -- there we go. So Lot 19 and Lot 22 appear

12 (Pages 42 to 45)

be disrupted.

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- both vast and empty. The area around the Ripley 1
- 2 Heating Plant in the top right corner has a
- 3 buffer to the top and right, but also appears
- 4 large and vacant. Why is it that the storage
- 5 capacity is so stringent and constricted, as you
- indicate, when your own map seems to indicate 6
- 7 anything but?

8 MR. GORDON: Frankly, I don't know if 9 it's fair to conclude that those large -- those

10 maps are vacant, to be honest with you. I think

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12 JUDGE SHEEHAN: There's nothing on 13 them like there is in the rest --

14 MR. GORDON: There's nothing on them 15 represented in this schematic, but in this

16 diagram --

17 JUDGE SHEEHAN: Well, that's the 18 record you gave us. What else do we have to go

19 from?

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20 MR. GORDON: I think it's based on the

21 representation of the university as to the

22 diagram represents what's at the Ripley Fuel there was clear error in that regard.

JUDGE SHEEHAN: Well, it could well be 2

that it's true there is a three-day storage 3

capacity for the areas denominated for storage. 4

But it doesn't mean that there aren't other 5

areas available for storage that simply weren't 6 7

used.

8 MR. GORDON: You know, I suppose we 9 could speculate that there, you know, someplace 10 a block away, two blocks away, there may be. As

11 to what that would mean in terms of

reconfiguring the plant in terms of being able 12

to then have a conveyor to actually have the 13

wood from a facility two blocks away, a storage 14

15 facility two blocks away, being able to feed

that into the boiler, those are all issues that, 16

frankly, were not presented in the record. I 17 think the question here is --18

19 JUDGE REICH: Well, who's burden is

20 it? I mean, if a central part of the BACT 21 analysis relates to storage, is there really

22 someone like Sierra Club's burden to find and

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Heating Plant.

2 I don't think they endeavored to

try to show what's on other lots. As I read their application, they're not diagraming and

indicating every structure on adjacent lots.

6 JUDGE SHEEHAN: Well, it certainly 7 raises the question -- there was no way that

8 evidently the university really attempted to

really clarify for us the true facts on the

10 ground there. And what they did give us appears

11 to show that there's a lot less storage

12 capacity.

13 MR. GORDON: I don't think so. I 14 think the representation on the record is that

15 the capacity of what is for storage for each of

those fuels is three days. The DEQ examined it. 16

17 It looked at that issue and that -- there's

18 nothing to contradict that other than, I

19 suppose, a potential surmise that maybe you

20 could have something on some adjacent lot. But

21 that's not -- there's nothing in the record to actually demonstrate and overcome to show that

make arguments for additional storage or is it 1

2 not your burden as the permit issuer to explore

what possibilities exist for storage that would allow for a more stringent limit and make a

5 determination as to whether those possibilities

6 are there or not?

MR. GORDON: I think when you apply 7 that question to this case, the burden is on the 8 Sierra Club here. Here, the record demonstrates

9 10 the permit application --

11 JUDGE REICH: I'm not talking about the appeal stage. I'm talking about at the 13 basic permit issuance stage.

14 MR. GORDON: Permit issuance stage. The information presented to the DEQ is that the 15 capacity of storage at this facility is three 16 days of wood here. 17

18 JUDGE REICH: And you have no independent obligation to verify that 19 20 information?

MR. GORDON: No, DEQ reviewed it and considered whether there was room for more

13 (Pages 46 to 49)

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1 storage capacity at this facility.

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JUDGE REICH: So you did consider whether there was room for more? You did an independent analysis to that and that independent analysis is part of the record?

MR. GORDON: I think what DEQ -- it shows that the DEO reviewed it, reviewed their permit application. The response to comments says that based on the review of it, they were satisfied that in fact, that was the capacity. In those circumstances, I think it's incumbent upon the Petitioner to say no, there's something wrong with that. You didn't actually look at X, Y, and Z. And if you had looked at X, Y, and Z. there would be clear error.

JUDGE REICH: Do you know --

MR. GORDON: And they haven't done that here.

19 JUDGE REICH: Is there anything in the 20 record that actually is an analysis, or is there 21 just the recitation that you looked at it and 22 reached this conclusion?

application had come in describing the boiler precisely the same way it did, it never 2

mentioned wood, that as part of the BACT 3

analysis, you would have had to consider wood as an option in terms of fuel?

MR. GORDON: You know, I think the question as to other -- given the physical circumstances and the physical capabilities of the boiler, whether it can in fact burn other fuels is something that you would then -- you have to perform doing a top-down BACT analysis as to the technological availability. Is it available? You know, the technological feasibility -- I mean, CFBs can burn other fuels. I think that's one of their advantages.

Then the question is, I think you would need to perform your top-down BACT analysis.

JUDGE SHEEHAN: One other question while I have the scheme up there, the design. You indicate that there's no room on-site to take anything but Marquette or Presque coal,

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MR. GORDON: I think the information 1

2 that's in the record as to the capacity is,

- 3 frankly, the information, primarily what's in
- 4 there, in their permit application as to how the
- 5 facility will be configured, the fact that
- 6 there's not only fuel storage, but you have to
- 7 take into account when you have fuel storage how
- 8 you're going to feed that fuel on the facility
- 9

grounds into the boiler. 10 I mean, there's a schematic I think, and the diagram reflects not only the 12 silos, but also the actual area that you need 13 for delivery, the area that you need to then 14 store it, the area that you need to take it 15 from the storage and feed it into the boiler. 16 When you take all of that into account, I 17 think the record shows that in fact, the 18 capacity is a fuel storage capacity. 19 JUDGE REICH: Can I ask a different

question while I still have the floor? Do you

-- and if not, why not -- that if this

agree with the position put forth by Sierra Club

- which I'll refer to as MPI coal. There seems to
- be no differentiation in even the coal storage
- area between one kind of coal and another. 3
- 4 Where does the statement in the record come to
  - the effect that there's no room for any other
- 6 kind of coal but those two?

7 MR. GORDON: I don't think the contention is that there's no room or -- for any 9 other type of coal. I think what the university

10 represented in its application was that it was

going to burn coal from two other sources. I 11 shouldn't say "two other," from two sources: 12

Either the Wisconsin Electric Presque Isle power 13

14 plant or the other utility that's in the area,

15 the Marquette Board of Light and Power. And so

the analysis then in terms of we're getting into 16

17 this issue as to who are the -- was the SO2

18 emission limit based on the lowest sulfur --19

JUDGE SHEEHAN: Wait, let's talk about your statement. You used the word "will," which does come from the permit application. It does

come from the evaluation form. Both say that

14 (Pages 50 to 53)

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